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INTERNATIONAL PRELIMINARY EXAMINATION REPORT
(PCT Article 36 and Rule 70)

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Applicant's or agent's file reference GN02031	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)

International application No. PCT/EP 03/50034	International filing date *(day/month/year)* 27.02.2003	Priority date *(day/month/year)* 28.02.2002

International Patent Classification (IPC) or both national classification and IPC
G06F3/12, G06F3/12

Applicant
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1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 7 sheets, including this cover sheet.

    ☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

    These annexes consist of a total of 4 sheets.

3. This report contains indications relating to the following items:

    I   ☒   Basis of the opinion
    II ☐   Priority
    III ☐   Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
    IV ☐   Lack of unity of invention
    V   ☒   Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
    VI ☐   Certain documents cited
    VII ☐   Certain defects in the international application
    VIII ☐ Certain observations on the international application

Date of submission of the demand	Date of completion of this report
05.08.2003	14.06.2004

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Form PCT/IPEA/409 (Cover Sheet) (January 2004)

INTERNATIONAL PRELIMINARY
EXAMINATION REPORT

International application No.   **PCT/EP 03/50034**

I. Basis of the report

1. With regard to the **elements** of the international application *(Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)):*

Description, Pages

1-3, 6   as published

4, 5   filed with telefax on 18.02.2004

Claims, Numbers

1-10   filed with telefax on 18.02.2004

Drawings, Sheets

1/1   as published

2. With regard to the **language,** all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

   These elements were available or furnished to this Authority in the following language: , which is:

   ☐   the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).

   ☐   the language of publication of the international application (under Rule 48.3(b)).

   ☐   the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

   ☐   contained in the international application in written form.

   ☐   filed together with the international application in computer readable form.

   ☐   furnished subsequently to this Authority in written form.

   ☐   furnished subsequently to this Authority in computer readable form.

   ☐   The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

   ☐   The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

   ☐   the description,   pages:

   ☐   the claims,   Nos.:

   ☐   the drawings,   sheets:

5. ☐   This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	
	No:	Claims	1-2,7,9-10
Inventive step (IS)	Yes:	Claims	
	No:	Claims	1-10
Industrial applicability (IA)	Yes:	Claims	1-10
	No:	Claims	

2. Citations and explanations

   see separate sheet

The examination is being carried out on the **following application documents:**
Text for the Contracting States: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU
LV MC MK NL PL PT RO SE SI SK TR
Description, pages:
1-3,6　　　　　　　　as published
4,5　　　　　　　　　with telefax of　　　　　　18/02/2004
Claims, No.:
1-10　　　　　　　　with telefax of　　　　　　18/02/2004
Drawings, sheets:
1/1　　　　　　　　　as published

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1. Claims 1-10 do not meet the requirements of Article 6 PCT in that the matter for
which protection is sought is not clearly defined.

1.1. The terms "job ticket" and "input channel" - which appear to be crucial for defining
the underlying problem - are not precisely defined in the claims, thereby rendering the
definition of the subject-matter of said claim/s unclear (Article 6 PCT).
In particular, the description specifies that "In prior art systems, <u>an input mechanism
needs to be associated with a job ticket</u>" (page 1, lines 29-32). As it would appear that it
is not the case for the job ticket mentioned in claim 1, this feature appears essential
and should be clearly and explicitly specified in independent method claim 1.

1.2. The feature "storing said input channel <u>within</u> said job ticket" in amended claim 6
and at page 4, lines 31-32 as amended is obscure for the following reason: since the
job ticket is defined in claim 1 as comprising the definition of an input channel, any step
of storing the job ticket automatically also stores said input channel <u>within</u> said job
ticket. Hence no separate method step to this effect appears necessary.

2. Reference is made to the following document/s/:
D1:　GB-A-2 344 483 (ROLAND MAN DRUCKMASCH) 7 June 2000 (2000-06-07)
D2:　EP-A-1 156 410 (HEIDELBERGER DRUCKMASCHINEN BR) 21 November 2001
　　　(2001-11-21)

2.1.　D1 (see in particular sections [0001] , [0003], [0004], [0011], [0015]-[0021], [0023],
[0027]-[0033] and [0061]-[0063] with fig. 1 and 2) relates to a system and method for
providing production printing instructions for an end document to be printed.
D1 defines a job as the combination of one or more input documents (Vorlagen)

([0011], [0016]) and the instructions to process them, and describes a number of input channels for inputting a document, see fig. 1.2 with [0003] [0011], [0016], [0019], where scanner and drives for accepting record carriers like disquette, CD-ROMs, paper, and Internet are provided. The input documents and instructions are delivered (in paper or electronic form) by the customer to an operator of the print factory at a job preparation station. A "job ticket" is defined as containing all information necessary for processing the job (col. 1, l. 48-50, col. 3, l. 27-30, [0017]).

The printed end document is made up of a plurality of other documents received from the customer which are to be inserted in a predefined order and in a predefined format. The computer is programmed to automatically convert the document into a ready for printer format file and merge the plurality of documents together to create a single document.

2.2. D2 describes a method for calibrating a digitally controllable printing machine having a permanent printing plate, for which image data has been created in machine-independent format in a pre-press stage. The image data is prepared for the printing process by a data processing device and is fed in adapted form to the printing machine 1. The data processing device uses a profile which corresponds precisely with the current machine condition, for the final data preparation for printing. The profile can be addressed using the correct color-space conversion for the printing machine (i.e., calibrated). For this purpose, at the time at which the data is prepared for image setting, a machine condition forecast for the time of printing is called up and, from this, together with the knowledge of the operating materials, the machine profile which most closely approaches that for the print job is determined. This profile is then used for the data preparation.

3. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1-2, 7, 9 and 10 is not new in the sense of Article 33(2) PCT.

3.1. The step of defining a job ticket is explicitly defined in D1 (col. 1, l. 48-50, col. 3, l. 27-30, [0017]), and the step of defining an input channel is implicit from that document (see the various forms of input documents submitted in person, via post or over the Internet at fig. 1 and 2); it makes no doubt for the skilled reader that a definition of one (claim 1) or more input channels (cf. claim 2, where a second input channel is defined) to be used for the job belongs to the information given by the customer at the job entry station and entered by the operator for generating the job

ticket (see already passages [0003] [0011], [0016], [0019]); hence the job ticket definition would comprise the definition of the input channel(s), since this information is essential to the workflow processing described in D1.

3.2. As to claim 2, since D1 foresees that the end document to be printed can be assembled from a plurality of input documents received from the customer which are to be inserted in a predefined order and in a predefined format, and the computer is programmed to, inter alia, merge the plurality of documents - also through different input channels, since they may come from different sources - together to create a single document (eg. the text and the photographs for a book, as suggested in [0021]).

3.3. The above objection applies mutatis mutandis to the other independent claims, namely claims 7, 9 and 10, as far as they refer to method claims 1-2.

4. Moreover, even if the subject-matter of method claims 1-2 would be novel, the application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1-10 does not involve an inventive step in the sense of Article 33(3) PCT.

4.1. As to claims 1-2. see items 2.1 and 3 above. Starting from D1 and with a view to improve the processing of a print job, the skilled designer would include the definition of one or more input channels as comprised in the definition of job ticket, according to the needs, since this information is essential for an efficient processing of the input documents. Since a same job can, according D1, be a composition of a number of input documents, the skilled designer would define plural channels in the job ticket when the job ticket relates to such a composition. Hence he/she would arrive at the subject matter of claims 1-2 without an inventive activity. This objection applies mutatis mutandis to the other independent claims, namely claims 7, 9 and 10, as far as they refer to method claims 1-2.

4.2. As to claims 3-4, the essential function of any job ticket in the prior art is precisely to define the settings, processing steps and "all information necessary for processing the job" (cf. D1). It is clear, in this respect, that different file formats and processing are necessary according to the nature of the input document and/or the input channel through which it has been submitted (see [0019]).

4.3. As to claim 5, the "information necessary for processing the job" (cf. D1) will of course be used for checking the state of the job, in particular for stopping a given input channel, according to the needs.

4.4. As to claim 6, storing important control information like a job ticket, including any (definition of) one or more input channels, is an obvious step (cf. document library in D1, col. 8, lines 4-8).

4.5. As to claim 7, the system described in D1 comprises all necessary means for carrying the steps of the method according to any of claims 1 to 6.
As to claim 8, various input means are provided at the job preparation station of D1, which allow to input both the input documents and the instructions for the job.
Consequently, claims 9 and 10 also lack an inventive step.

company, and that this input has to be checked more strictly than the input from input channels 11 and 12. For these two input channels 11, 12 the usual normalizing step 21, "NRM", and the usual preflighting step 31, "PREF" are applied, whereas for input channel

5 13 another, stricter normalizing step 22, "NRM$_S$" and another, stricter preflighting step 32, "PREF$_S$", are used (a normalizer creates reliable PDF-files from the incoming files, while a preflight tool verifies critical elements, such as font embedding or image quality, of files).

10 An advantage of the invention is that input channels can easily be stopped when jobs are completed, or when the state of a job changes in some other way. Suppose e.g. that a particular job received all its documents; when the job reaches this state, the job may automatically stop its input channels. This is a protection

15 against further, erroneous documents being input. If an input channel is stopped, it will no longer deliver input. Stopping a hot folder input channel may be implemented by still storing documents in the folder associated with the hot folder, but no longer processing them; stopping an input channel for streaming input may

20 be implemented by removing the stream channel; preferably, the definitions of the input channels are preserved when they are stopped. In this way, stopped input channels can easily be reactivated.

Another advantage of the invention is that, preferably, all
25 input channels of a job are deleted if a job is deleted; a separate clean-up operation of the input channels is thus not necessary.

It is preferred that an input channel only refers to a single job. When the job is submitted for execution, this allows to check for possible conflicts - e.g. a hot folder may not be in use by
30 another job.

Yet another advantage of the invention is related to the way in which the input channel definitions and the job ticket may be stored. In a preferred embodiment, by means of the job ticket editor the input mechanisms for the specified job are set up and the
35 input channel definitions are stored within the job ticket. This

AMENDED SHEET

has the advantage of allowing better system consistency. Job tickets
may be stored in an extendable standard format like Adobe's PJTF
(Portable Job Ticket Format) or the Job Definition Format, JDF, from
CIP4.

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Having described in detail preferred embodiments of the current
invention, it will now be apparent to those skilled in the art that
numerous modifications can be made therein without departing from
the scope of the invention as defined in the appending claims.

- 7 -

[CLAIMS]

1. A method for defining a job ticket (10) for a job in a pre-press
   workflow system, the method comprising the steps of:
   - defining an input channel (11-13) for accepting at least one
     document by said pre-press workflow system and for performing a
     check of said at least one document;
   - defining a job ticket (10) for assembling said job from said at
     least one document and for processing said job by said pre-
     press workflow system;
   characterized in that said job ticket definition comprises said
   input channel definition.

2. The method according to claim 1 further comprising the step of:
   - defining a second input channel (11-13);
   wherein said job ticket definition comprises said second input
   channel definition.

3. The method according to any one of the preceding claims further
   comprising the steps of:
   - defining a first setting for said input channel (11-13);
   - defining a second setting for said second input channel (11-
     13), wherein said second setting is different from said first
     setting.

4. The method according to any one of the preceding claims further
   comprising the steps of:
   - defining a first processing step (21, 31) for said input
     channel (11-12);
   - defining a second processing step (22, 32) for said second
     input channel (13), wherein said second processing step (22,
     32) is different from said first processing step (21, 31).

5. The method according to any one of the preceding claims further
   comprising the steps of:

- 8 -

-checking a state of said job;

-stopping said input channel (11-13) if said state is a
   particular predetermined state.

5   6. The method according to any one of the preceding claims further
       comprising the step of:
       -storing said definition of said input channel (11-13) within
        said job ticket (10).

10 7. A system for processing data comprising means for carrying out
       the steps of the method according to any one of claims 1 to 6.

    8. The system according to claim 7 further comprising an input
       device for inputting data to said job via said input
15   channel (11-13).

    9. A computer program comprising computer program code means adapted
       to perform the steps of the method according to any one of claims
       1 to 6 when said program is run on a computer.
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    10. A computer readable medium comprising program code adapted to
       carry out the method according to any one of claims 1 to 6 when
       run on a computer.

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